Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Please amend the claims as follows:

1. (Currently Amended) A method for the production of a membrane electrode unit for direct methanol fuel cells, comprising an anode gas diffusion substrate, an anode catalyst layer, an ionomer membrane, a cathode catalyst layer and a cathode gas diffusion substrate, wherein the anode catalyst layer is applied to the anode gas diffusion substrate, and the cathode catalyst layer is ~~present~~ applied directly ~~on~~ to the ionomer membrane.

2. (Currently Amended) The method ~~membrane electrode unit~~ as claimed in claim 1, wherein the anode catalyst layer is applied both to the anode gas diffusion substrate and to the ionomer membrane, and wherein the cathode catalyst layer is ~~present~~ applied directly ~~on~~ to the membrane.

3. (Currently Amended) The method ~~membrane electrode unit~~ as claimed in claim 1, wherein the ~~layer thickness of the~~ anode catalyst layer ~~is~~ has a thickness of between 20 and 200 micron and ~~the layer thickness of~~ the cathode catalyst layer ~~is~~ has a thickness between 5 and 50 micron.

4. (Currently Amended) The method ~~membrane electrode unit~~ as claimed in claim 1, wherein the ~~precious metal loading of the~~ anode layer has a precious metal loading of ~~is~~ between 0.25 and 6 mg of precious metal/cm2 and ~~the precious metal loading of~~ the cathode layer ~~is~~ has a precious metal loading of between 0.1 and 2.5 mg of precious metal /Cm^2.

5. (Currently Amended) The method ~~membrane electrode unit~~ as claimed in claim 1, wherein supported or unsupported bi-metallic platinum/ruthenium catalysts are used as anode catalyst.

6. (Currently Amended) The method ~~membrane electrode unit~~ as claimed in claim 1, wherein supported or unsupported platinum-containing catalysts are used as cathode catalyst.

7. (Currently Amended) A method for the production of a membrane electrode unit for direct methanol fuel cells, comprising the steps of

~~the~~ coating ~~of~~ an anode gas diffusion substrate with anode catalyst ink to form a coated anode gas diffusion substrate,

~~the~~ drying ~~of~~ the coated anode gas diffusion substrate,

the coating of an ionomer membrane on one side with cathode catalyst ink,

~~the~~ drying ~~of~~ the ionomer membrane coated on one side with the cathode catalyst ink and

~~the~~ uniting ~~of~~ the coated anode gas diffusion substrate with the ionomer membrane coated on one side and ~~the~~ with a cathode gas diffusion substrate.

8.-9. (Cancelled)

10. (New) A method for the production of a membrane electrode unit for direct methanol fuel cells, comprising the steps:

coating an anode gas diffusion substrate with anode catalyst ink to form a coated anode gas diffusion substrate,

drying the coated anode gas diffusion substrate,

coating an ionomer membrane on a first side thereof with the cathode catalyst ink,

drying the ionomer membrane coated on said first side with the cathode catalyst ink,

coating a second side of the ionomer membrane with anode catalyst ink,

drying the ionomer membrane coated on both sides, and

uniting the coated anode gas diffusion substrate with the ionomer membrane coated on both sides and with the cathode gas diffusion substrate.

11. (New) The method as claimed in claim 7, further comprising washing of catalyst-coated gas diffusion substrates or the ionomer membrane with water.

12. (New) The method as claimed in claim 10, further comprising washing of catalyst-coated gas diffusion substrates or the ionomer membrane with water.

13. (New) A direct methanol fuel cell comprising membrane electrode units produced by the method as claimed in claim 1.